

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022491**Date Inspected:** 23-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Westmont Industries**Location:** Santa Fe Springs, CA.**CWI Name:** Ruben Dominguez**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Travelers**Summary of Items Observed:**

This Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding, QC inspection, non-destructive testing and painting of the Travelers. Upon the arrival of the QA Inspector, the following observations were made:

**Traveler Test Rack**

This QA Inspector randomly observed WMI production personnel performing fitting, welding and cutting activities on various assemblies for the Traveler Test Rack.

**SAS-WB Traveler**

This QA Inspector observed WMI production welder Mr. Jose Rodriguez (WID # 3031) continuing to perform Flux Core Arc Welding (FCAW) activities on the SAS-WB Traveler frame assemblies. This QA Inspector observed Mr. Rodriguez performing the FCAW in all positions on tube steel and plate material, randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Juan Jimenez (WID # 3059) continuing to perform Flux Core Arc Welding (FCAW) activities on the SAS-WB Traveler frame assemblies. This QA Inspector observed Mr.Jimenez performing the FCAW in all positions on tube steel and plate material, randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Jim Muetzel (WID # 3133) continuing to perform Flux Core Arc Welding (FCAW) activities on the SAS-WB Traveler frame assemblies. This QA Inspector observed Mr.Muetzel performing the FCAW in all positions on tube steel and plate material, randomly throughout the shift.

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This QA Inspector observed WMI production personnel Mr. Cesar Canales and Mr. Raymundo Anaya performing layout and fitting activities for the SAS-WB frame assemblies.

### E2/E3-EB Traveler

This QA Inspector observed WMI production welder Mr. Jose Miranda (WID # 3083) performing Flux Core Arc Welding (FCAW) tacking and fitting activities on the E2/E3-EB Traveler suspension arm assemblies. This QA Inspector observed Mr. Miranda performing the activities on tube steel and plate material, randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Jose Delgadillo (WID # 3193) continuing to perform Flux Core Arc Welding (FCAW) activities on the E2/E3-EB Traveler suspension arm assemblies. This QA Inspector observed Mr. Delgadillo performing the FCAW welding activities on tube steel and plate material, randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Mike Ruiz (WID # 3155) continuing to perform Flux Core Arc Welding (FCAW) activities on the E2/E3-EB Traveler suspension arm assemblies. This QA Inspector observed Mr. Ruiz performing the FCAW welding activities on tube steel and plate material, randomly throughout the shift.

This QA Inspector randomly observed Smith Emery QC Inspector Ruben Dominguez performing Magnetic Particle Testing (MT) on the previously completed fillet and flare groove welds, for the E2/E3-EB Traveler suspension arm assemblies. During observation, this QA Inspector spoke with QC Inspector Dominguez and Mr. Dominguez explained that the testing was being performed in accordance to the approved MT Procedure SE-MT-CT.D1.1-105, Rev. # 1 and that the testing is being performed on 100% of the completed fillet and flare groove welds. Mr. Dominguez further explained that Visual Testing (VT) was previously performed on the welds and was acceptable, per AWS D1.1 2002 Visual Acceptance Criteria. This QA Inspector noted that per the contract requirements, 100% MT is required on fillet and flare groove welds, for the suspension arm assemblies.

This QA Inspector randomly observed that Smith Emery QC Inspector Mr. Ruben Dominguez was present, during the above mentioned welding and fitting activities. During random observation, this QA Inspector observed that the applicable WPS's and copies of the shop drawings, appeared to be located near each work station, where the above mentioned welding and fitting activities were being performed. This QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the applicable process and position of welding. This QA Inspector randomly observed QC Inspector Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the applicable WPS.

### Paint: SAS and E2/E3-EB Travelers

This QA Inspector was informed by RPI Coating Quality Control Representative Mr. Andrew Gonzales that additional sandblasting activities had been performed on the SAS and E2/E3-EB Traveler assemblies. This QA Inspector was informed by Mr. Gonzales that he was currently setting up to perform the surface profile testing on the blasted base material. This QA Inspector then met with and observed Mr. Gonzales utilizing what appeared to

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be Testex Press-O-Film and a micrometer to perform the testing. Initially, this QA Inspector observed Mr. Gonzales applying the film to the blasted surface then utilize one end of a pen to perform rubbing activities on the clear portion of the test strip. This QA Inspector then observed Mr. Gonzales utilize a micrometer to measure the surface profile on the clear film part of the strip, in which the rubbing was performed. Mr. Gonzales explained to this QA Inspector that the initial setting on the micrometer was set at 2mils over, due to the thickness of the Press-O-Film paper. During observation, this QA Inspector observed that the readings appeared to be 2.9 mils, 2.9 mils, 3.0, 2.8 and 2.9 mils. This QA Inspector noted that the contract requires a surface profile of 1.57 mils (40 um) -3.15mils (80um) and that the above mentioned tested profile, appear to be in compliance with the contract requirements. After surface profile testing, this QA Inspector then observed Mr. Torres perform a test for soluble salts on the previously blasted base metal areas. This QA Inspector observed the testing being performed at random areas which appeared to meet or exceed one test per 200 square meters, per the contract requirements. After testing, this QA Inspector observed that the soluble salt content appeared to be 1.5-2.0 Parts Per Million (PPM). This QA Inspector was then informed by Mr. Torres that primer application will soon start.

This QA Inspector observed that the activities mentioned above, appeared to be in compliance with the contract requirements and this QA Inspector observed no non-conforming issues, on this date.

### Summary of Conversations:

As noted above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Vance,Sean	Quality Assurance Inspector
<b>Reviewed By:</b>	Edmondson,Fred	QA Reviewer

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